Technology Delivered Matrix

This matrix illustrates how a number of teaching activities can be accomplished within various technology delivery formats. Information here is based on several broad premises for technology delivered instruction. The purpose of the matrix is to show the numerous options found within technology delivered instruction.

Synchronous/Real Time Place Bound Instruction	Synchronous or Asynchronous	Asynchronous/Time Delayed Instruction
T1 IP Video Satellite	Internet	Broadcast Television Video Home Viewing Media Streaming Print (Independent Study)

Topic List

A-F	G-L	M-R	S-Z
Debate/local and remote participants	Hands on experience (eg, mini lab)	Make up exam/a few students	Slide show
Exam	ITV feed	Office hours/local students	Small group meeting
Field trip	Lecture	Office hours/remote students	Small group presentation
Guest lecturer/local		Pop quiz	
Guest lecturer/remote		PowerPoint presentation	
		Problem Solving on white board	
		Public reading	

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Debate/local and remote participants	View FeedbackAsk a Question
T1	Facilitator will switch cameras among the origination and receive sites to show debate teams in different locations. Teams must switch microphones off when not speaking.
IP Video	The IP Video units "switch" cameras and microphones to the person or persons speaking. Facilitator coordination may not be needed.
Satellite	With satellite, the receive sites see the origination sites only, and audio is two-way. Debate will be audio only. Visual cues will not be evident to teams.
Internet	Online debate might be accomplished in a chat room, in a text only format, or with web cameras or conferencing software with the capacity to stream video and switch locations. Cameras or conferencing software would be an additional cost to instruction.
Broadcast Television	Debate is prerecorded. Enrolled students are observers, not participants.
Video Home Viewing	Debate is prerecorded. Enrolled students are observers, not participants.
Media Streaming	Debate is prerecorded. Enrolled students are observers, not participants.
Print (Independent Study)	IS students generally study in isolation from other students; the delay in transmitting materials from students to instructor and back makes debate via Independent Study unlikely.

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Exam	View FeedbackAsk a Question
T1	Facilitators, at the direction of the instructor, proctor exams. Facilitators may grade exams, at the direction of the instructor, or convey exams to the instructor. The instructor should plan enough lead time to get tests, either physically or electronically, from the instructor to the receive sites.
IP Video	Facilitators, at the direction of the instructor, proctor exams. Facilitators may grade exams, at the direction of the instructor, or convey exams to the instructor. The instructor should plan enough lead time to get tests, either physically or electronically, from the instructor to the receive sites.
Satellite	Facilitators, at the direction of the instructor, proctor exams. Facilitators may grade exams, at the direction of the instructor, or convey exams to the instructor. The instructor should plan enough lead time to get tests, either physically or electronically, from the instructor to the receive sites.
Internet	Online testing can be simple or complex. Simple: faculty can post exams online. They must assume that students log in and take their exams, on a honor system, following the instructors instructions (ex. open book vs. closed book), not unlike a take-home exam. Online exams can be timed. Immediate feedback often possible. There are many more elegant, more complex testing solutions such as using a database pool of questions to dynamically generate a different subset of items for each student. Test banks may require significant initial effort (although many publishers make test banks available with texts) but reduce the effort needed to give exams over time.
Broadcast Television	The instructor will arrange proctor(s) or may students identify an acceptable proctor. Student may have to travel to take exam. Standards of best practice suggest travel should not exceed 30 minutes. Acceptabble proctors include university or college testing centers, public school superintendents or principals, and public library reference librarians; relatives,

	friends, and work supervisors are unacceptable.
Video Home Viewing	The instructor will arrange proctor(s) or may students identify an acceptable proctor. Student may have to travel to take exam. Standards of best practice suggest travel should not exceed 30 minutes. Acceptabble proctors include university or college testing centers, public school superintendents or principals, and public library reference librarians; relatives, friends, and work supervisors are unacceptable.
Media Streaming	Streamed exams require a web-knowledgeable proctor. Requires specific software/hardware on both ends, exams delayed in return depending on when students takes exam. MEDIOCRE ANSWER
Print (Independent Study)	The instructor will arrange proctor(s) or may students identify an acceptable proctor. Student may have to travel to take exam. Standards of best practice suggest travel should not exceed 30 minutes. Acceptabble proctors include university or college testing centers, public school superintendents or principals, and public library reference librarians; relatives, friends, and work supervisors are unacceptable.

Field Trip	View FeedbackAsk a Question
T1	Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
IP Video	Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Satellite	Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Internet	Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Broadcast Television	Students may be directed to view select television broadcasts. Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit

	the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Video Home Viewing	Students may be directed to view select television broadcasts. Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Media Streaming	The instructor may select "streamed" broadcast field trips. Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.
Print (Independent Study)	Setting a field trip to a single location may depend on where students in the class are located. Field trips can be designed to instruct students to take an individual or small group field trip in their locale (ex. attend a performing arts event, a library, or museum, including events online). Internet resource enable the student to "visit" almost an infinite number of "sites" to see what is there. The instructor may "visit the site first" to determine its strengths and appropriateness. Field trips involving travel involving minors require insurance coverage, parental permission, and adult supervision.

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Guest lecturer/local	View FeedbackAsk a Question
T1	The instructor or facilitator may provide the guest lecturer some basic instruction on the EDNET system. The facilitator should prepare to "follow" lecturer with the camera.
IP Video	Requires a local technician with ability to "follow" lecturer, may require some technical training.
Satellite	Requires a local technician with ability to "follow" lecturer, may require some technical training.
Internet	May include pre-taped lectures in an online class. If webconferencing or streaming services are available, the lecture can be delivered live.
Broadcast Television	Programs are pre-taped with guests included in taping.
Video Home Viewing	Programs are pre-taped with guests included in taping.
Media Streaming	Requires a local technician with ability to "follow" lecturer, may require some technical training.
Print (Independent Study)	Lecture scripts can be included in extended syllabi or send on video or CD to students.

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Guest lecturer/remote	View FeedbackAsk a Question
T1	Requires facilitator to switch between instructor and lecturer.
IP Video	The IP Video units "switch" cameras and microphones to the remote lecturer. Instructor may coordinate question and answer periods as needed. Facilitator coordination of various equipment the lecturer may wish to use is essential as a guest may not be familiar with switch equipment.
Satellite	With satellite, the receive sites see the origination sites only, and audio is two-way. Students in receive sites will hear the lecturer. NOTE: Remote guest lecturer via satellite is could be prohibitively expensive depending on the location of the lecturer and the effort needed to get a signal of the lecture to the satellite.
Internet	The guest lecturer would prepare written copy, audio, video and have it converted to pdf or HTML, then posted on a website. Lectures can also be pre-taped, then streamed.
Broadcast Television	Lecturers can be pre-taped, then broadcast. If recorded, a lecture can be delivered at one or more times in the future. A guest speaker's written notes, comments, presentation slides can be included mailed or available online to be used as handouts before, during and after broadcast.
Video Home Viewing	Lecturers can be pre-taped, then sent on videocassette, CD, or DVD. If recorded, a lecture can be delivered at one or more times in the future. A guest speaker's written notes, comments, presentation slides can be included to be used as handouts before, during and after presentations.
Media Streaming	Lectures can be pre-taped, then streamed on demand. Lectures can also be streamed live. A guest speaker's written notes, comments, presentation slides can be included mailed or available online to be used as handouts before, during and after presentations.
Print (Independent Study)	Lectures can be pre-taped, then transcribed to print or dubbed to video, CD, or DVD, and mailed. A guest speaker's written notes, comments, presentation slides can be included in print materials for reference.

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Hands on experience (eg, mini lab)	View FeedbackAsk a Question
T1	Like a live classroom, logistics (ex, timing, having students conduct experiments) and room conditions need to be carefully considered: all sites need a "set" of materials and equipment as well as be physically able to stage the activity. Consider staging the activity at one site with other sites observing. Facilitators with knowledge of the topic would be helpful.
IP Video	Like a live classroom, logistics (ex, timing, having students conduct experiments) and room conditions need to be carefully considered: all sites need a "set" of materials and equipment as well as be physically able to stage the activity. Consider staging the activity at one site with other sites observing. Facilitators with knowledge of the topic would be helpful.
Satellite	Like a live classroom, logistics (ex, timing, having students conduct experiments) and room conditions need to be carefully considered: all sites need a "set" of materials and equipment as well as be physically able to stage the activity. Consider staging the activity at one site with other sites observing. Facilitators with knowledge of the topic would be helpful.
Internet	Each student would need access to a set of materials. Logistics and instructions are important: most likely, online students would conduct the hands on experience unsupervised, without real time instructor guidance.
Broadcast Television	Each student would need access to a set of materials. Logistics and instructions are important: most likely, online students

	would conduct the hands on experience unsupervised, without real time instructor guidance. With broadcast, students might be able to "follow along" as the instructor demonstrates. In some instances it may be enough for students to observe an experience taking place during the broadcast.
Video Home Viewing	Each student would need access to a set of materials. Logistics and instructions are important: most likely, broadcast students would conduct the hands on experience unsupervised, without real time instructor guidance. With broadcast, students might be able to "follow along" as the instructor demonstrates. In some instances it may be enough for students to observe an experience taking place during the broadcast.
Media Streaming	Each student would need access to a set of materials. Logistics and instructions are important: most likely, streaming students would conduct the hands on experience unsupervised, without real time instructor guidance. In some instances it may be enough for students to observe an experience taking place during the streamed broadcast.
Print (Independent Study)	Each student would need access to a set of materials. Logistics and instructions are important: Independent Study students will conduct the hands on experience unsupervised, without real time instructor guidance.

ITV feed	View FeedbackAsk a Question
T1	Delivering broadcast television into a T1 site classroom is do-able. Timing of the feed must be synced to the class period. It may be wise to check copyright to ensure you have permission for this delivery.
IP Video	Delivering broadcast television into a T1 site classroom is do-able. Timing of the feed must be synced to the class period. It may be wise to check copyright to ensure you have permission for this delivery.
Satellite	Delivering broadcast television into a T1 site classroom is do-able. Timing of the feed must be synced to the class period. It may be wise to check copyright to ensure you have permission for this delivery.
Internet	ITV feed into the Internet can be done as videostreaming. Requires significant technical expertise, usually only available at the TOC. Storage of video on computer server is necessary.
Broadcast Television	n/a
Video Home Viewing	n/a
Media Streaming	ITV feeds can be streamed across the Internet. Requires significant technical expertise, usually only available at the TOC. Storage of video on computer server is necessary.
Print (Independent Study)	Some video programs are available as printed text (a transcript) or as close captioned (used by the deaf community).

Lecture		View Feedback Ask a Question
T1	Delivering a lecture over T1 is like delivering a lecture in a classroom. Lectures can include PowerPoint-type presentations, whiteboard work, and all other media one might use in a classroom. Successful T1 instructors work to engage students in remote sites. Facilitators can help with this by switching the camera from one site to another.	
IP Video	Delivering a lecture in a synchronous situation is like delivering a lecture in a classroom. Lectures can include PowerPoint-type presentations, whiteboard work, and all other media one might use in a classroom. Successful IP Video instructors work to engage students in remote sites. The IP Video equipment will switch the camera from one site to another.	
Satellite	Delivering a lecture over satellite is like delivering a lecture in a classroom with the exception that you cannot see your remote students. Lectures can include PowerPoint-type presentations, whiteboard work, and all other media one might use in a classroom. Successful satellite instructors work to engage students in remote sites. Facilitators can help motivate remote students to participate in Q&A and discussion.	
Internet	Lectures can be delivered online in print or prerecorded audio/video to be delivered as streaming video.	
Broadcast Television	Broadcast classes, in essense, are prerecorded lectures. Again, instructors can include all media available in a classroom or sound stage. Instructors of broadcast classes, who are generally not trained actors, must rehearse and practice broadcast "oration" skills which may seem more exaggerated than public oration used in the classroom. Broadcast quality presentation also involves set design and lighting. Many instructors use a teleprompter to read lengthier passages in their lectures.	
Video Home Viewing	Video classes, in essense, are prerecorded lectures. Again, instructors can include all media available in a classroom or sound stage. Instructors of broadcast classes, who are generally not trained actors, must rehearse and practice broadcast "oration" skills which may seem more exaggerated than public oration used in the classroom. Video quality presentation also involves set design and lighting. Many instructors use a teleprompter to read lengthier passages in their lectures.	
Media Streaming	Broadcast or video classes, in which are prerecorded lectures, can be stored for future streaming. See description for broadcast.	
Print (Independent Study)	Lectures texts are included in extended syllabi. Printed lectures can include charts and graphics.	

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Make up exam/a few students		View Feedback Ask a Question
T1	Because of the cost considerations, activities involving only a few students in a should probably be scheduled off the T1 system. Make up exams would then require a proctor for students remote from the instructor. The proctor will arrange testing date and time.	
IP Video	Because of the cost considerations, activities involving only a few students should probably be scheduled off the IP Video system. Make up exams would then require a proctor for students remote from the instructor. The proctor will arrange testing date and time.	
Satellite	Because of the cost considerations, activities involving only a few students should probably be scheduled off the satellite system. Make up exams would then require a proctor for students remote from the instructor. The proctor will arrange testing date and time.	

Internet	Make up exams can be proctored offline. An instructor can also post a make up exam online for a specific time period. This would allow for computer graded exams.
Broadcast Television	Make up exams for asynchronous classes are administered by the instructor or a proctor. The instructor could post an exam on a website or require face-to-face testing.
Video Home Viewing	Make up exams for asynchronous classes are administered by the instructor or a proctor. The instructor could post an exam on a website or require face-to-face testing.
Media Streaming	Make up exams for asynchronous classes are administered by the instructor or a proctor. The instructor could post an exam on a website or require face-to-face testing.
Print (Independent Study)	Make up exams for asynchronous classes are administered by the instructor or a proctor. The instructor could post an exam on a website or require face-to-face testing.

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Office hours/local students	**View FeedbackAsk a Question**
T1	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
IP Video	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Satellite	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Internet	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Broadcast Television	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Video Home Viewing	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Media Streaming	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Print (Independent Study)	Instructors can schedule on campus office hours for local students. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.

Office hours/remote students	View FeedbackAsk a Question
T1	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
IP Video	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Satellite	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Internet	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Broadcast Television	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Video Home Viewing	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Media Streaming	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.
Print (Independent Study)	Remote student access to their teacher may be achieved by phone, mail, email, or personal visit. Consider that distance learning students are not always available during traditional daytime hours; evening and weekend offices hours may be helpful. Timely response to phone and email messages is also helpful.

Pop quiz	View FeedbackAsk a Question
T1	Requires advance planning to distribute the actual quiz, if paper and pencil instrument. The facilitators act as proctors in remote sites. The facilitators may be called upon to gather and grade the quiz or gather the quiz and send to the instructor.
IP Video	Requires advance planning to distribute the actual quiz, if paper and pencil instrument. Some IP Video classes are delivered without formal facilitators at remote sites. If this is the case, the instructor will have to formulate an "honor system" protocol for students taking the quiz at remote sites and for grading and/or gathering and transmitting the quiz back to the instructor.

Satellite	Requires advance planning to distribute the actual quiz, if paper and pencil instrument. The facilitators act as proctors in remote sites. The facilitators may be called upon to gather and grade the quiz or gather the quiz and send to the instructor.
Internet	The fact that students may log on to their online class at different times and days takes away a bit of the element of surprise. Instructors can post quizzes on the class website with instructions to complete the exercise within a certain time period. It might be wise to alert students at the beginning of the class that they should log into class on a regular basis and that pop quizzes are a part of the class.
Broadcast Television	As with IP Video, students in broadcast classes are generally watching their class in different locations. The quiz could be recorded on the video tape. The instructor will have to formulate an "honor system" protocol for students taking the quiz at remote sites and for grading and/or gathering and transmitting the quiz back to the instructor.
Video Home Viewing	As with IP Video and Broadcast classes, students in broadcast classes are generally watching their class in different locations and at different times. The quiz could be recorded on the video tape. The instructor will have to formulate an "honor system" protocol for students taking the quiz at remote sites and for grading and/or gathering and transmitting the quiz back to the instructor.
Media Streaming	Students can stream classes on demand, in different locations and at different times. The quiz could be recorded on the media to be streamed. The instructor will have to formulate an "honor system" protocol for students taking the quiz and for grading and/or gathering and transmitting the quiz back to the instructor.
Print (Independent Study)	No element of surprise, all "take at home" quizzes are printed in the course materials. Students are on their honor to take the quiz under the conditions laid out by the instructor.

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PowerPoint presentation	View FeedbackAsk a Question
T1	A computer is tied into the system video stream. In essence, you are using the delivery system as a data projector. The facilitator or instructor will have to switch between the computer feed and classroom camera(s).
IP Video	A computer is tied into the system video stream. In essence, you are using the delivery system as a data projector. The facilitator or instructor will have to switch between the computer feed and classroom camera(s).
Satellite	A computer is tied into the system video stream. In essence, you are using the delivery system as a data projector. The facilitator or instructor will have to switch between the computer feed and classroom camera(s).
Internet	Slide shows may be posted on a website in their original form with the assumption that students have the software needed to view the presentations. Slide shows may also be converted to html, then posted online.
Broadcast Television	Broadcast and video classes may include slide presentations. The slide show itself is created in editing rooms with software and equipment used to develop broadcast quality productions.
Video Home Viewing	Broadcast and video classes may include slide presentations. The slide show itself is created in editing rooms with software and equipment used to develop broadcast quality productions.
Media Streaming	Broadcast slide shows can be captured on video to be streamed.
Print (Independent Study)	Slide shows can be included in an Independent Study course on a video cassette.

Problem Solving on white board	View FeedbackAsk a Question
T1	Instructors use a white board tool called an ELMO that is patched into the delivery system. You must consider the size of the text and its legibility to ensure it is easily read on a television screen. The facilitator or instructor must switch between the ELMO and classroom cameras.
IP Video	Instructors use a white board tool called an ELMO that is patched into the delivery system. You must consider the size of the text and its legibility to ensure it is easily read on a television screen. The facilitator or instructor must switch between the ELMO and classroom cameras.
Satellite	Instructors use a white board tool called an ELMO that is patched into the delivery system. You must consider the size of the text and its legibility to ensure it is easily read on a television screen. The facilitator or instructor must switch between the ELMO and classroom cameras.
Internet	Course Management Software like WebCT include chat rooms with white board functionality. As students in different locations, who cannot see each other, add to a white board "discussion," there may be momentary delays before everyone can see the newest additions. As with text-based chat, the "netiquette" of taking turns in adding content to such a discussion, may have to be learned. It might be a good idea to limit white board chats to a small student groups at one time.
Broadcast Television	Some people think using a white board for broadcast classes is a bit unprofessional looking for television or video viewing. Broadcast quality production can generate animated slide shows that replicate a prerecorded white board discussion. The viewing audience unable to ask about the problem solving process as it is prerecorded.
Video Home Viewing	Some people think using a white board for broadcast classes is a bit unprofessional looking for television or video viewing. Broadcast quality production can generate animated slide shows that replicate a prerecorded white board discussion. The viewing audience unable to ask about the problem solving process as it is prerecorded.
Media Streaming	Some people think using a white board for broadcast classes is a bit unprofessional looking for television or video viewing. Broadcast quality production can generate animated slide shows that replicate a prerecorded white board discussion. The viewing audience unable to ask about the problem solving process as it is prerecorded.
Print (Independent Study)	Problem solving exercises are represented in linear steps in print.

Public reading	View FeedbackAsk a Question
T1	The facilitator will switch the cameras from the speaker to classroom cameras. The guest may need some orientation to speaking on camera and engaging remote students. The facilitator or instructor should make all mechanical switches between periphral equipment.
IP Video	The IP Video units "switch" cameras and microphones to the person or persons speaking. The guest may need some orientation to speaking on camera and engaging remote students. The facilitator or instructor should make all mechanical switches between periphral equipment.
Satellite	Satellite makes it possible to have a guest lecturer from distant locations including other countries. Note that up- and downlink costs may be significant. Experienced facilitators will assist the speaker.
Internet	Guest lectures require the teacher or facilitator to prepare written copy, audio, video, converted to HTML, if needed, then post on a website.
Broadcast Television	Guest lecturers are prerecorded for future broadcast, viewing, or streaming. Recording a guest lecturer allows you to capture the thoughts of individual who are difficult to include in classes on a regular basis, such as a political leader or an international figure who visits Utah once, and broadcast that lecture repeatedly in the future.
Video Home Viewing	Guest lecturers are prerecorded for future broadcast, viewing, or streaming. Recording a guest lecturer allows you to capture the thoughts of individual who are difficult to include in classes on a regular basis, such as a political leader or an international figure who visits Utah once, and broadcast that lecture repeatedly in the future.
Media Streaming	Guest lecturers are prerecorded for future broadcast, viewing, or streaming. Recording a guest lecturer allows you to capture the thoughts of individual who are difficult to include in classes on a regular basis, such as a political leader or an international figure who visits Utah once, and broadcast that lecture repeatedly in the future.
Print (Independent Study)	Written notes, comments, presentations by guest speakers can be included in printed course materials.

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Slide show	View FeedbackAsk a Question
T1	Similar to live classroom. Can use Elmo document camera to display slides, or importing slides electronically into PowerPoint slide show. Should not be a problem unless audio/video sycn is off. A printed version of the slide show can be provided students before, during, or after the presentation as a reference.
IP Video	Similar to live classroom. Can use Elmo document camera to display slides, or importing slides electronically into PowerPoint slide show. Should not be a problem unless audio/video sycn is off. A printed version of the slide show can be provided students before, during, or after the presentation as a reference.
Satellite	Similar to live classroom. Can use Elmo document camera to display slides, or importing slides electronically into PowerPoint slide show. Should not be a problem unless audio/video sycn is off. Easily available for origination site; NA for remote sites which will see a video of the slide show. A printed version of the slide show can be provided students before, during, or after the presentation as a reference.
Internet	Posting slide presentations online requires the instructor or facilitator to prepare audio, video, and have it converted to HTML, then post on a website.
Broadcast Television	Slide shows would be prepared as part of the production of a broadcast or video class. Must insure top video quality. A printed version of the slide show can be provided students before, during, or after the presentation as a reference.
Video Home Viewing	Slide shows would be prepared as part of the production of a broadcast or video class. Must insure top video quality.
Media Streaming	Videos of slide shows would be prepared as part of the production of a broadcast or video class, then streamed at a later date. Must insure top video quality.
Print (Independent Study)	A printed version of slide presentations can be included in extended syllabi.

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Small group meeting		
T1	Having multiple sites with small groups is easily done. Microphone use must be clear. Use of a content facilitator is often necessary. Facilitator must also keep students on task.	
IP Video	Having multiple sites with small groups is easily done. Microphone use must be clear. Use of a content facilitator is often necessary. Facilitator must also keep students on task.	
Satellite	Having multiple sites with small groups is easily done. Microphone use must be clear. Use of a content facilitator is often necessary. Facilitator must also keep students on task.	
Internet	Similar to a text/whiteboard chat session. Each individual need access to computer and internet. Recommend small groups of 4-5 students only. Teacher acts as facilitator.	
Broadcast Television	Would require students to be able to contact each other, then get together. The "Town Hall" meetings used by PBS stations are a good model. Such meetings, however, are expensive to produce. Small group meetings for broadcast, video, or streamed classes happen in a face-to-face setting versus on television or broadcast. NOTE: Some telecourses tape with a small groups of students as a TV "audience" who participate in TV lectures. Students in subsequent terms cannot "participate" in the previously recorded discussions.	
Video Home Viewing	Would require students to be able to contact each other, then get together. The "Town Hall" meetings used by PBS stations are a good model. Such meetings, however, are expensive to produce. Small group meetings for broadcast, video, or streamed classes happen in a face-to-face setting versus on television or broadcast. NOTE: Some telecourses tape with a small groups of students as a TV "audience" who participate in TV lectures. Students in subsequent terms cannot "participate" in the previously recorded discussions.	
Media Streaming	Would require students to be able to contact each other, then get together. The "Town Hall" meetings used by PBS stations are a good model. Such meetings, however, are expensive to produce. Small group meetings for broadcast, video, or streamed classes happen in a face-to-face setting versus on television or broadcast. NOTE: Some telecourses tape with a small groups of students as a TV "audience" who participate in TV lectures. Students in subsequent terms cannot "participate" in the previously recorded discussions.	
Print (Independent Study)	Most correspondence courses are offered open enrollment: a single students works at his/her own pace to complete a course. Correspondence students are generally remotely located. Getting together as a small group may be logistically difficult. That said, a small group of students could communicate in person, by phone or email.	

Small Group Presentation	View FeedbackAsk a Question
T1	Having three or four students come to the front of the classroom requires good facilitator use. Requires facilitator to be present to adjust camera, switch between students and visual aids used. Microphones for all. Rehearsal. Clear camera control is necessary.
IP Video	Having three or four students come to the front of the classroom requires good facilitator use. Requires facilitator to be present to adjust camera, switch between students and visual aids used. Microphones for all. Rehearsal. Clear camera control is necessary.
Satellite	Since video feed is not returned on satellite, remote site could not give a presentation unless strictly audio. We have had satellite sites tape their presentations and send them here for us to show student audience.
Internet	Posting presentations requires the teacher or facilitator to prepare audio or video provided by students, have it converted to HTML and then posted on a website.
Broadcast Television	Broadcast TV is usually too expensive and logistically difficult for small group presentations. Would require students and instructors to get together outside of school to plan for and deliver the presentation.
Video Home Viewing	Requires students and instructors to get together outside of the broadcast class. A video tape put into the VCR by a small group of students gathered together at several sites is quite effective. Students may fill out worksheets, quizzes, during the presentation, and submit these documents to the instructor.
Media Streaming	Since video feed is not returned via streaming, remote site could not give a presentation unless sites tape their presentations and send them here for us to show student audience.
Print (Independent Study)	Most correspondence courses are offered open enrollment: a single students works at his/her own pace to complete a course. Correspondence students are generally remotely located. Getting together as a small group may be logistically difficult. That said, a small group of students could communicate in person, by phone or email to develop a presentation to submit to the instructor.

This document was created by Cyd Grua—Utah State Board of Regents, George Miller-Utah State Office of Education, and Darren Olsen of Utah State University in 2004. It can be found at the following internet address:

http://www.uacte.org/matrix/